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10/811,684	03/29/2004	Nicolo F. Machi	H0006251-1055	2980

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EXAMINER

TON, ANABEL

ART UNIT PAPER NUMBER

2875

DATE MAILED: 03/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/811,684

Applicant(s)

MACHI ET AL.

Examiner

Anabel M. Ton

Art Unit

2875

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 07 March 2006.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 7-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 17-23 is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-9, 12-16, 24 and 27 is/are rejected.
- 7) ☒ Claim(s) 10, 11, 25, 26, 28 and 29 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Claim Objections***

1. Claim 8 is objected to because of the following informalities: It is unclear what applicant is intending to define by "with another type" in line 3. Appropriate correction is required.
2. Claim 15 is objected to because of the following informalities: applicant recites that the mounting module is compatible with each of the multiple types of mounting platforms, there is no antecedent basis for "the multiple types of mounting platforms" in claim 1 from which claim 15 depends. Appropriate correction is required.
3. As best understood, the following rejection applies

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1,4,5,8,9,12-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Gronemeier et al (6,461,029).
3. Gronemeier discloses a plurality of modular components including a mounting module having one or more solid state light sources (4), a cut off shield that limits the

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light emitted by the solid-state light sources according to predetermined angular cutoff parameters (12) and a base assembly module including electronic circuitry that electrically connects the solid state light sources to a power within the aircraft (2,17), wherein the modular components are configured so that the device is mountable within the wingtips of multiple types of aircraft without modifying the wingtip (inherent since Gronemeier discloses the modular lighting device for an aircraft and since there is no mention of modifying the wing to accommodate the modular lighting device it is assumed that modification is not necessary , col. 2 lines 42-51)); the mounting module includes a heat sink (24), the mounting module comprises a casting wherein the heat sink comprises cooling fins incorporated into the casting of the mounting module (24,25), a fastening mechanism operable to fasten the mounting module to the base assembly module and thereby fasten the device to the aircraft wing( 23), the fastening mechanism includes at least one screw(23)and corresponding clearance holes (inherent, since clearance holes to fit screws to provide fastening to respective surfaces are necessary to complete the fastening means) in the mounting module base assembly and aircraft wing, the cut-off shield module is fastened the mounting module and base assembly via the fastening mechanism (fig 1); the base assembly module is a type whose electronic circuitry is passive, the base assembly module being interchangeable with another type whose electronic circuitry is active; the base assembly module includes electronic circuitry that is active , the active electronic circuitry being configured as a current control device for distributing a constant current to the solid state light source as the power source voltage fluctuates, the base assembly module being

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interchangeable with another type whose electronic circuitry is passive (col. 5 lines 28-64). With regards to claim 15, since Gronemeier discloses that the position lamp is used in the end of aircraft wings, it is considered inherent that it is compatible with multiple types of mounting platforms r since there is no mention of modifying a/the platform(s) to which it is to be mounted.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gronemeier.

6. Gronemeier discloses the claimed invention except for the recitation of the base assembly module specifically being replaceable. It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the base assembly module replaceable since such a feature would be cost effective in that the entire lighting device would not need replacement.

7. Claims 16,24,27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fredericks et al as and further in view of Sommers (6,674,096)

8. With regards to the recitation in claim 16, "the device configured to be installed at a wing of an aircraft", has not been given patentable weight because the recitation

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occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

9. Fredericks discloses the claimed invention except for the recitation of each side emitting LED emits light around its optical axis such that radiant intensity peaks in the range of 60-100 degrees off the optical axis. Fredericks discloses a mounting module including two LED'S emitting light from the side of the device (94), one or more reflectors (74) operable to reflect at least a portion of light emitted by the LED'S and reflectors being configured so that the light emitted by the LED'S and the light reflected by the reflectors combine according to a first distribution of light and a lambertian LED operable to emit light according to a second distribution of light, wherein the lambertian LED is configured so that the first and second distributions of light combine and form a pattern of light (Although Fredericks discloses all the LED'S as lambertian type, as claimed by applicant, Fredericks is considered to disclose all the limitations of this claim since the lambertian LED'S alone emit light in one distribution and in combination with the reflecting surface 74, emit light of a second distribution, which when combined form a pattern of light); the shape of the reflectors is determined based on light emitting characteristics of the LED'S to produce the first distribution of light. Sommers discloses a side emitting LED that emits light around its optical axis (as taken from a vertical

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direction through reflector 26) such that the radiant intensity peaks in the range of 60-100 degrees off the optical axis (when an x axis is drawn perpendicular to the y axis represented by the vertical intersecting the reflector at the meeting point of both reflective sides at the "v", the radiant intensity peak (represented by light beams 38,40) is considered to peak between 60-100). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Fredericks to use the side emitting LED's as taught by Sommers instead of the LED's emitting light from a side of the lighting device in Fredericks to produce a predetermined light emission for a desired purpose, since such a modification would provide a forward light distribution from the side emitting LED's since reflectors 74 would promote such a distribution from the side emitting LEDs of Sommers.

In claim 27, with regards to the statement "thereby allowing the device to be mounted to each of the multiple types of mounting platform without retrofitting the device or modifying the mounting platform" has not been given any patentable weight since, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 370 F.2d 576, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 312 F.2d 937, 939, 136 USPQ 458, 459 (CCPA 1963). Applicant has not provided structure in the claim to distinguish the "multiple types of mounting platforms without

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retrofitting the device of modifying the mounting platform" over the mounting platform of Fredericks.

***Allowable Subject Matter***

10. Claim 17-23 allowed.
11. Claims 10,11,26,28 and 29 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
12. The following is a statement of reasons for the indication of allowable subject matter: The reasons can be found in the previous office action.

***Conclusion***

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.




Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anabel M. Ton whose telephone number is (571) 272-2382. The examiner can normally be reached on 08:00-16:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on (571) 272-2378. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Anabel M Ton  
Examiner  
Art Unit 2875

AMT



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